Gunter, Jason

From: Nations, Mark <mnations@doerun.com>
Sent: Monday, August 11, 2014 12:48 PM
To: Gunter, Jason
Cc: Yingling, Mark; James, Kevin; Neaville, Chris; Montgomery, Michael; 'Kevin Lombardozzi' (kevinl@VALHI.NET); Norman Lucas (cityhall@i1.net); robert.hinkson@dnr.mo.gov; brandon.wiles@dnr.mo.gov; Ty Morris (TMorris@barr.com); Hedrick, Samantha K.
Subject: National July Progress Report
Attachments: Natl_07-14.doc; 2014-07-17 NAT UAO Pace Lab Report.pdf

Jason,
Attached is the July report.
Mark

THE DOE RUN COMPANY

Remediation Group

Mark Nations
Mining Properties Manager
mnations@doerun.com

August 11, 2014

Mr. Jason Gunter
Remedial Project Manager
U.S. Environmental Protection Agency
Region 7 - Superfund Branch
11201 Renner Blvd.
Lenexa, KS 66219

Re: National Mine Tailings Site Progress Report

Dear Mr. Gunter:

As required by Article VI, Section 51 of the Unilateral Administrative Order (Docket No.CERCLA-07-2006-0231) for the referenced project and on behalf of The Doe Run Company and NL Industries, Inc., the progress report for the period July 1, 2014 through July 31, 2014 is enclosed. If you have any questions or comments, please call me at 573-518-0800.

Sincerely,

Mark Nations
Mining Properties Manager

Enclosure
c: Mark Yingling – TDRC (electronic only)
Kevin James – TDRC (electronic only)
Chris Neaville – TDRC (electronic only)
Michael Montgomery – TDRC (electronic only)
Kevin Lombardozzi – NL Industries, Inc.
Matt Whitwell – City of Park Hills
Norm Lucas – Park Hills – Leadington Chamber of Commerce
Robert Hinkson – MDNR
Brandon Wiles – MDNR
Ty Morris – Barr Engineering

National Mine Tailings Site
Park Hills, Missouri
Removal Action - Monthly Progress Report
Period: July 1, 2014 – July 31, 2014

1. **Actions Performed and Problems Encountered This Period:**
   a. Work continued on the development of the Post Removal Site Control Plan for the site.

2. **Analytical Data and Results Received This Period:**
   a. During this period, water samples were collected at the sampling locations identified in Appendix C of the Removal Action Work Plan where water was present. Copies of the analytical results from the last sampling event are included with this progress report.
   b. During this period, the ambient air monitoring samples for June were processed and the Ambient Air Monitoring Report for June 2014 was completed. A copy of the Ambient Air Monitoring Report for June is attached.

3. **Developments Anticipated and Work Scheduled for Next Period:**
   a. Continue developing the Post Removal Site Control Plan for the site.
   b. Continue developing the Removal Action Report and the record drawings.
   c. Complete monthly water sampling activities as described in the Removal Action Work Plan.
   d. Complete air monitoring activities as described in the Removal Action Work Plan.

4. **Changes in Personnel:**
   a. None.

5. **Issues or Problems Arising This Period:**
   a. None.

6. **Resolution of Issues or Problems Arising This Period:**
   a. None.

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 25, 2014

Amy Sanders
The Doe Run Company
P. O. Box 500
Viburnum, MO 65566

RE: Project: National UAO (National)
Pace Project No.: 60173904

Dear Amy Sanders:
Enclosed are the analytical results for sample(s) received by the laboratory on July 18, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jamie Church
jamie.church@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: National UAO (National)
Pace Project No.: 60173904

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: National UAO (National)
Pace Project No.: 60173904

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60173904001	**16404 / NAT EAST**	Water	07/17/14 11:02	07/18/14 08:30

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: National UAO (National)
Pace Project No.: 60173904

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60173904001	**16404 / NAT EAST**	EPA 200.7	TDS	6	PASI-K
		EPA 200.7	SMW	3	PASI-K
		SM 2540C	NDL	1	PASI-K
		SM 2540D	NDL	1	PASI-K
		SM 2540F	NDL	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		EPA 300.0	OL	1	PASI-K
		SM 5310C	JMC1	1	PASI-K

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: National UAO (National)
Pace Project No.: 60173904

Sample: 16404 / NAT EAST **Lab ID: 60173904001** Collected: 07/17/14 11:02 Received: 07/18/14 08:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Cadmium	ND	ug/L	5.0	0.56	1	07/18/14 17:30	07/24/14 10:46	7440-43-9	
Calcium	**112000**	ug/L	100	7.8	1	07/18/14 17:30	07/24/14 10:46	7440-70-2	
Lead	**7.7**	ug/L	5.0	2.2	1	07/18/14 17:30	07/24/14 10:46	7439-92-1	
Magnesium	**60000**	ug/L	50.0	17.0	1	07/18/14 17:30	07/24/14 10:46	7439-95-4	
Total Hardness by 2340B	**526000**	ug/L	500		1	07/18/14 17:30	07/24/14 10:46		
Zinc	**132**	ug/L	50.0	12.5	1	07/18/14 17:30	07/24/14 10:46	7440-66-6	
200.7 Metals, Dissolved (LF)	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
Cadmium, Dissolved	ND	ug/L	5.0	0.56	1	07/22/14 16:25	07/23/14 15:50	7440-43-9	
Lead, Dissolved	ND	ug/L	5.0	2.2	1	07/22/14 16:25	07/23/14 15:50	7439-92-1	
Zinc, Dissolved	**99.0**	ug/L	50.0	12.5	1	07/22/14 16:25	07/23/14 15:50	7440-66-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**714**	mg/L	5.0	5.0	1		07/21/14 10:57		
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	ND	mg/L	5.0	5.0	1		07/22/14 10:57		
2540F Total Settleable Solids	Analytical Method: SM 2540F								
Total Settleable Solids	ND	mL/L/hr	0.20	0.20	1		07/18/14 14:55		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**8.0**	Std. Units	0.10	0.10	1		07/18/14 13:10		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**253**	mg/L	50.0	2.8	50		07/22/14 18:44	14808-79-8	
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.1**	mg/L	1.0	0.50	1		07/25/14 12:40	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: . National UAO (National)
Pace Project No.: 60173904

QC Batch: MPRP/28119
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Associated Lab Samples: 60173904001

METHOD BLANK: 1412785 Matrix: Water
Associated Lab Samples: 60173904001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	ug/L	ND	5.0	07/24/14 10:33	
Calcium	ug/L	ND	100	07/24/14 10:33	
Lead	ug/L	ND	5.0	07/24/14 10:33	
Magnesium	ug/L	ND	50.0	07/24/14 10:33	
Total Hardness by 2340B	ug/L	ND	500	07/24/14 10:33	
Zinc	ug/L	ND	50.0	07/24/14 10:33	

LABORATORY CONTROL SAMPLE: 1412786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	1000	1040	104	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Lead	ug/L	1000	1020	102	85-115	
Magnesium	ug/L	10000	10100	101	85-115	
Total Hardness by 2340B	ug/L		66700			
Zinc	ug/L	1000	911	91	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1412787 1412788

Parameter	Units	60173939001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	ND	1000	1000	1050	1050	105	105	70-130	1	10	
Calcium	ug/L	62000	10000	10000	72400	71900	104	99	70-130	1	9	
Lead	ug/L	45.6	1000	1000	992	991	95	95	70-130	0	10	
Magnesium	ug/L	22700	10000	10000	32100	32100	95	94	70-130	0	9	
Total Hardness by 2340B	ug/L	248000			313000	312000				1		
Zinc	ug/L	771	1000	1000	1660	1660	89	89	70-130	0	11	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: National UAO (National)
Pace Project No.: 60173904

QC Batch: MPRP/28161 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Dissolved
Associated Lab Samples: 60173904001

METHOD BLANK: 1414353 Matrix: Water
Associated Lab Samples: 60173904001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium, Dissolved	ug/L	ND	5.0	07/23/14 15:43	
Lead, Dissolved	ug/L	ND	5.0	07/23/14 15:43	
Zinc, Dissolved	ug/L	ND	50.0	07/23/14 15:43	

LABORATORY CONTROL SAMPLE: 1414354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium, Dissolved	ug/L	1000	1020	102	85-115	
Lead, Dissolved	ug/L	1000	1010	101	85-115	
Zinc, Dissolved	ug/L	1000	943	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1414355 1414356

Parameter	Units	60173907002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium, Dissolved	ug/L	ND	1000	1000	1030	1020	103	102	70-130	1	10	
Lead, Dissolved	ug/L	ND	1000	1000	1000	996	100	99	70-130	1	10	
Zinc, Dissolved	ug/L	ND	1000	1000	941	935	94	93	70-130	1	11	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: National UAO (National)
Pace Project No.: 60173904

QC Batch: WET/49144 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 60173904001

METHOD BLANK: 1413402 Matrix: Water
Associated Lab Samples: 60173904001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	07/21/14 10:54	

LABORATORY CONTROL SAMPLE: 1413403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1010	101	80-120	

SAMPLE DUPLICATE: 1413404

Parameter	Units	7517192001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	470000	469000	0	10	

SAMPLE DUPLICATE: 1413405

Parameter	Units	60173910002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	58800	58900	12	10	D6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: National UAO (National)
Pace Project No.: 60173904

QC Batch: WET/49169 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 60173904001

METHOD BLANK: 1413951 Matrix: Water
Associated Lab Samples: 60173904001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	07/22/14 10:54	

SAMPLE DUPLICATE: 1413952

Parameter	Units	60173878002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	260	234	11	10	D6

SAMPLE DUPLICATE: 1413953

Parameter	Units	60173883001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	320	314	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: National UAO (National)
Pace Project No.: 60173904

QC Batch: WET/49117
QC Batch Method: SM 4500-H+B
Analysis Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Associated Lab Samples: 60173904001

SAMPLE DUPLICATE: 1412652

Parameter	Units	60173798001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	5.2	5.2	0	5	H6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: National UAO (National)
Pace Project No.: 60173904

QC Batch: WETA/30329 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60173904001

METHOD BLANK: 1413889 Matrix: Water
Associated Lab Samples: 60173904001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	07/22/14 15:08	

LABORATORY CONTROL SAMPLE: 1413890

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1413891 1413892

Parameter	Units	60173667001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	26.6	10	10	36.7	36.8	101	102	80-120	0	15	

MATRIX SPIKE SAMPLE: 1414254

Parameter	Units	60173904001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	253	250	497	97	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: National UAO (National)
Pace Project No.: 60173904

QC Batch: WETA/30374 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60173904001

METHOD BLANK: 1415950 Matrix: Water
Associated Lab Samples: 60173904001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	07/25/14 12:01	

LABORATORY CONTROL SAMPLE: 1415951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	101	80-120	

MATRIX SPIKE SAMPLE: 1415952

Parameter	Units	60173904001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.1	5	6.6	109	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: National UAO (National)
Pace Project No.: 60173904

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: National UAO (National)
Pace Project No.: 60173904

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60173904001	**16404 / NAT EAST**	EPA 200.7	MPRP/28119	EPA 200.7	ICP/21248
60173904001	**16404 / NAT EAST**	EPA 200.7	MPRP/28161	EPA 200.7	ICP/21277
60173904001	**16404 / NAT EAST**	SM 2540C	WET/49144		
60173904001	**16404 / NAT EAST**	SM 2540D	WET/49169		
60173904001	**16404 / NAT EAST**	SM 2540F	WET/49120		
60173904001	**16404 / NAT EAST**	SM 4500-H+B	WET/49117		
60173904001	**16404 / NAT EAST**	EPA 300.0	WETA/30329		
60173904001	**16404 / NAT EAST**	SM 5310C	WETA/30374		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60173904

60173904

Client Name: Doc Run Company

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 7706 2744 6273 Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☐ No ☒ Seals intact: Yes ☐ No ☒

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☒ zplc

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 2.4

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 7/18

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☒Yes ☐No ☐N/A	6. Sett Solids pH
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	7.
Sufficient volume:	☒Yes ☒No ☐N/A	8. insufficient unpreserved volume received
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	9.
Containers intact:	☒Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☒N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC:	☒Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix:	WT	13.
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A	14.
Exceptions: VOA, coliform, (TOC) O&G, WI-DRO (water), Phenolics	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☐No ☒N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Jana Church 7/18/14

Project Manager Review: _____ Date: _____

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

THE DOE RUN COMPANY

Section A — Required Client Information:

Company:	The Doe Run Company
Address:	PO Box 500
Email To:	asanders@doerun.com
Phone: (573) 689-4535	Fax: (573) 244-8179
Requested Due Date/TAT:	5 To 7 Days

Section B — Required Project Information:

Report To:	Amy Sanders
Copy To:	
Purchase Order No.:	
Project Name:	National UAO (National)
Project Number:	

Section C — Invoice Information:

Attention:	Amy Sanders
Company Name:	The Doe Run Company
Address:	PO Box 500, Viburnum, MO 6556
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ UST ☐ RCRA

Site Location STATE: MO

Page: 1 of 1

COC#: 636

60173904

Requested Analysis Filtered (Y/N)

ITEM #	Section C Required Sample Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE/TIME: COMPOSITE START DATE (mm/dd/yy)	COMPOSITE START TIME (Military)	COMPOSITE END / GRAB DATE (mm/dd/yy)	COMPOSITE END / GRAB TIME (Military)	SAMPLE TEMP AT COLLECTION	Total # OF CONTAINERS	Bottles / Preservatives: 250 mL Unpreserved	500 mL Unpreserved	1 L Unpreserved	250 mL Nitric	250 mL Amber Glass H_2SO_4	250 mL Plastic H_2SO_4	1000 mL Amber HCL	250 mL ZnAc/NaOH	500 mL Amber Glass H_2SO_4	*See Additional Comments Below — ↓ Analysis Test ↓	SEMO Lab Project No./ Lab I.D.
										N	N	N	N	N	N	N	N	N	N	N
1	16404 BP1U BP3U BP3N 1635 (2.0)	WT	G			07/17/14	1102		5	2		1	1	1					CD-D, PB-D, ZN-D, HARD, PH, SO4, SS, TDS, TOC, TSS	Nat East
																			CD-T, PB-T, ZN-T	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				

001

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME (Military)	ACCEPTED BY / AFFILIATION	DATE	TIME (Military)	SAMPLE CONDITIONS: Temp in °C	pH in SU	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)
	Larry Hopkins	7/17/14		Pace	7/18	0950	2.4		Y	N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Larry Hopkins

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 7/17/14